Application Number	10/530,775
Filing Date	01/18/2006
First Named Inventor	Richard Anderson
Art Unit	1793
Examiner Name	G. Wyszomierski
Attorney Docket Number	16561.143

		Data at	Kind	PATENT DO	Name of Patentee or	Pgs, Col., Lns, where
Examiner Initial*	Cite No	Patent Number	Code ¹	Issue Date	Applicant of cited Document	Relevant Psgs or Relevant Figs Appear
	1.	1771928		1930-07-29	Jung	
	2.	2205854		1940-06-25	Kroll	
	3.	2607675		1952-08-19	Gross	
	4.	2647826		1953-08-04	Jordan	
	5.	2816828		1957-12-17	Benedict et al.	
	6.	2823991		1958-02-18	Kamlet	
	7.	2827371		1958-03-18	Quin	
	8.	2835567		1958-05-20	Willcox	
	9.	2846303		1958-08-05	Keller et al.	
	10.	2846304		1958-08-05	Keller et al.	
	11.	2882143		1959-04-14	Schmidt	
	12.	2882144		1959-04-14	Follows et al.	
	13.	2890112		1959-06-09	Winter	
	14.	2895823		1959-07-21	Lynskey	
	15.	2915382		1959-12-01	Hellier et al.	
	16.	2941867		1960-06-21	Maurer	
	17.	2944888		1960-07-12	Quin	
	18.	3058820		1962-10-16	Whitehurst	
	19.	3067025		1962-12-04	Chisholm	
	20.	3085871		1963-04-16	Griffiths	
	21.	3085872		1963-04-16	Kenneth	
	22.	3113017		1963-12-03	Homme	
	23.	3331666		1967-07-18	Robinson et al.	
	24.	3519258		1970-07-07	Ishizuka	
	25.	3535109		1970-10-20	Ingersoll	
	26.	3650681		1972-03-21	Sugahara et al.	
	27.	3825415		1974-07-23	Johnston et al.	
	28.	3836302		1974-09-17	Kaukeinen	
	29.	3847596		2006-03-16	Holland et al.	
	30.	3867515		1975-02-18	Bohl et al.	
	31.	3919087		1975-11-11	Brumagim	
	32.	3927993		1975-12-23	Griffin	
	33.	3943751		1976-03-16	Akiyama et al.	
	34.	3966460		1976-06-29	Spink	
	35.	4007055		1977-02-08	Whittingham	
	36.	4009007		1977-02-22	Fry	

Doc code: IDS

Doc description: Information Disclosure Statement (IDS) Filed

Application Number	10/530,775
Filing Date	01/18/2006
First Named Inventor	Richard Anderson
Art Unit	1793
Examiner Name	G. Wyszomierski
Attorney Docket Number	16561.143

Examiner	Cite	Patent	Kind	. PATENT DO	Name of Patentee or	Pgs, Col., Lns, where
examiner Initial*	No	Number	Code ¹	Issue Date	Applicant of cited Document	Relevant Psgs or Relevant Figs Appear
	37.	4017302		1977-04-12	Bates et al.	
	38.	4070252		1978-01-24	Bonsack	
	39.	4128421		1978-12-05	Marsh et al.	
	40.	4141719		1979-02-27	Hakko	
	41.	4149876		1979-04-17	Rerat	
	42.	4190442		1980-02-26	Patel	
	43.	4331477		1982-05-25	Kubo et al.	
	44.	4379718		1983-04-12	Grantham et al.	l .
	45.	4401467		1983-08-30	Jordan	
	46.	4402741		1983-09-06	Pollet et al.	
	47.	4414188		1983-11-08	Becker	
	48.	4423004		1983-12-27	Ross	
	49.	4425217		1984-01-10	Beer	
	50.	4432813		1984-02-21	Williams	
	51.	4445931		1984-05-01	Worthington	
	52.	4454169		1984-06-12	Hinden et al.	
	53.	4518426		1985-05-21	Murphy	
	54.	4519837		1985-05-28	Down	
	55.	4521281		1985-06-04	Kadija	
-	56.	4555268		1985-11-26	Getz	
	57.	4556420		1985-12-03	Evans et al.	
	58.	4604368		1986-08-05	Reeve	
	59.	4606902		1986-08-19	Ritter	
	60.	4687632		1987-08-18	Hurd	
	61.	4689129		1987-08-25	Knudsen	
_	62.	4725312		1988-02-16	Seon et al.	
	63.	4828008		1989-05-09	White et al.	
	64.	4830665		1989-05-16	Winand	
	65.	4839120		1989-06-13	Baba et al.	
	66.	4877445		1989-10-31	Okudaira et al.	
	67.	4897116		1990-01-30	Scheel	
	68.	4902341		1990-02-20	Okudaira et al.	
	69.	4915729		1990-04-10	Boswell et al.	
	70.	4923577		1990-05-08	McLaughlin et al.	
	71.	4940490		1990-07-10	Fife et al.	
	72.	4941646		1990-07-17	Stelts et al.	

Application Number	10/530,775
Filing Date	01/18/2006
First Named Inventor	Richard Anderson
Art Unit	1793
Examiner Name	G. Wyszomierski
Attorney Docket Number	16561.143

Examiner	Cite	Patent Kind		. PATENT DC	Name of Patentee or Applicant of cited	Pgs, Col., Lns, where Relevant Psgs or
Initial*	No	Number	Code		Document	Relevant Figs Appear
	73.	4985069		1991-01-15	Traut	
	74.	5028491		1991-07-02	Huang et al.	
	75.	5032176		1991-07-16	Kametani et al.	
	76.	5055280		1991-10-08	Nakatani et al.	
	77.	5064463		1991-11-12	Ciomek	
	78.	5082491		1992-01-21	Rerat	
	79.	5147451		1992-09-15	Leland	
	80.	5149497		1992-09-22	McKee et al.	
	81.	5160428		1992-11-03	Kuri	
	82.	5164346		1992-11-17	Giunchi et al.	
	83.	5167271		1992-12-01	Lange et al.	
	84.	5176741		1993-01-05	Bartlett et al.	
	85.	5176810		1993-01-05	Volotinen et al.	
	86.	5211741		1993-05-18	Fife	
	87.	5259862		1993-11-09	White et al.	
	88.	5338379		1994-08-16	Kelly	
	89.	5356120		1994-10-18	König et al.	
	90.	5427602		1995-06-27	DeYoung et al.	
	91.	5437854		1995-08-01	Walker et al.	
	92.	5439750		1995-08-08	Ravenhall et al.	
	93.	5448447		1995-09-05	Chang	
•	94.	5460642		1995-10-24	Leland	
	95.	5498446		1996-03-12	Axelbaum et al.	
	96.	5580516		1996-12-03	Kumar	
	97.	5637816		1997-06-10	Schneibel	
	98.	5779761		1998-07-14	Armstrong et al.	
	99.	5897830		1999-04-27	Abkowitz et al.	
	100.	5914440		1999-06-22	Celik et al.	
	101.	5948495		1999-09-07	Stanish et al.	
	102.	5951822		1999-09-14	Knapick et al.	
	103.	5954856		1999-09-21	Pathare et al.	
	104.	5958106		1999-09-28	Armstrong et al.	
	105.	5986877		1999-11-16	Pathare et al.	
	106.	5993512		1999-11-30	Pargeter et al.	
	107.	6010661		2000-01-04	Abe et al.	
	108.	6027585	1	2000-02-22	Patterson et al.	

ELECTRONICALLY FILED ON: 05/27/2009

Doc code: IDS

Doc description: Information Disclosure Statement (IDS) Filed

Application Number	10/530,775
Filing Date	01/18/2006
First Named Inventor	Richard Anderson
Art Unit	1793
Examiner Name	G. Wyszomierski
Attorney Docket Number	16561.143

			U.S.	PATENT DO		
Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pgs, Col., Lns, where Relevant Psgs or Relevant Figs Appear
	109.	6040975		2000-03-21	Mimura	
	110.	6099664		2000-08-08	Davies	
	111.	6103651		2000-08-15	Leitzel	
	112.	6136062		2000-10-24	Loffeholz et al.	
	113.	6180258		2001-01-30	Klier	
	114.	6193779		2001-02-27	Reichert et al.	
	115.	6210461		2001-04-03	Elliott	
	116.	6238456		2001-05-29	Wolf et al.	
	117.	6309570		2001-10-30	Fellabaum	
	118.	6309595		2001-10-30	Rosenberg et al.	
	119.	6409797		2002-06-25	Armstrong et al.	
	120.	6432161		2002-08-13	Oda et al.	
	121.	6488073		2002-12-03	Blenkinsop et al.	
	122.	6502623		2003-01-07	Schmitt	
	123.	6602482		2003-08-05	Kohler et al.	
	124.	6689187		2004-02-10	Oda	
	125.	6727005		2004-04-27	Gimondo et al.	
	126.	6745930		2004-06-08	Schmitt	
	127.	6824585		2004-11-30	Joseph et al.	
	128.	6861038		2005-03-01	Armstrong et al.	
	129.	6884522		2005-04-26	Adams et al.	
	130.	6902601		2005-06-07	Nie et al.	
	131.	6921510		2005-07-26	Ott et al.	
110	132.	6955703		2005-10-18	Zhou et al.	
	133.	7041150		2006-05-09	Armstrong et al.	
	134.	7351272		2008-04-01	Armstrong et al.	
	135.	7410610		2008-08-12	Woodfield et al.	
	136.	7435282		2008-10-14	Armstrong et al.	
	137.			2008-11-04	Armstrong et al.	
	138.	7501007		2009-03-10	Anderson et al.	
	139.	7501089		2009-03-10	Armstrong et al.	
	140.	H1642	T	1997-04-01	Ogden	
	141.	RE32260	1	1986-10-07	Fry	

ELECTRONICALLY FILED ON: 05/27/2009

Doc code: IDS Doc description: Information Disclosure Statement (IDS) Filed

Application Number	10/530,775
Filing Date	01/18/2006
First Named Inventor	Richard Anderson
Art Unit	1793
Examiner Name	G. Wyszomierski
Attorney Docket Number	16561,143

		U. S. PAT	ENT A	PPLICATION	PUBLICATIONS	i
Examiner Initial*	Cite No	Publication Number	Kind Code ¹	Publication Date	Name of Patentee or Applicant of cited Document	Pgs, Col., Lns, where Relevant Psgs or Relevant Figs Appea
	1.	2002/0050185		2002-05-02	Oda	
	2.	2002/0152844		2002-10-24	Armstrong et al.	
	3.	2003/0061907		2003-04-03	Armstrong et al.	
	4.	2003/0145682		2002-09-10	Anderson et al.	
	5.	2004/0123700		2004-07-01	Zhou et al.	
	6.	2005/0081682		2005-04-21	Armstrong et al.	
	7.	2005/0150576		2005-07-14	Venigalla	
	8.	2005/0225014		2005-10-13	Armstrong et al.	
	9.	2005/0284824		2005-12-19	Anderson et al.	
	10.	2006/0086435		2006-04-27	Anderson et al.	
	11.	2006/0107790		2006-05-25	Anderson et al.	
	12.	2006/0123950		2006-06-15	Anderson et al.	
	13.	2006/0150769		2006-07-13	Armstrong et al.	
	14.	2006/0230878		2006-10-19	Anderson et al.	
	15.	2007/0017319		2007-01-25	Jacobsen et al.	
-	16.	2007/0079908	T	2007-04-12	Jacobsen et al.	
	17.	2007/0180951		2007-08-09	Armstrong et al.	
	18.	2008/0031766		2008-02-07	Dariusz et al.	
	19.	2008/0152533		2008-06-26	Ernst et al.	
	20.	2008/0187455		2008-08-07	Armstrong et al.	
	21.	2008/0199348		2008-08-21	Armstrong et al.	
	22.	2007/0180952		2007-08-09	Lanin et al.	
	23.	2006/0102255		2006-05-18	Woodfield et al.	

ELECTRONICALLY FILED ON: 05/27/2009

Doc code: IDS Doc description: Information Disclosure Statement (IDS) Filed

Application Number	10/530,775
Filing Date	01/18/2006
First Named Inventor	Richard Anderson
Art Unit	1793
Examiner Name	G. Wyszomierski
Attorney Docket Number	16561.143

		FO	REIGN	PATE	ENT DOCUM	IENTS		_
Exam. Initial*	Cite No	Foreign Document Number ³	Country code ²	Kind Code ⁴	Publication Date	Name of Patentee or Applicant of cited Document	Pgs, Col., Lns, where Relevant Pssgs or Relevant Figs Appear	T ⁵
	1.	AU2003263081			2004-06-18	Anderson et al.		
	2.	AU587782			1985-11-28	Martin		
	3.	CA2196534			1996-02-15	Armstrong et al.		
	4.	EA006615						_
	5.	EA007634					1	
	6.	EP0298698			1989-01-11	Okudaira et al.		
	7.	EP0299791			1989-01-18	Okudaira et al.	<u> </u>	
	8.	EP1441039			2004-07-28	Ott et al.		<u>L</u>
	9.	EP1657317			2006-05-17	Woodfield et al.		
	10.	GB722184			1955-01-19	Levy et al.		
	11.	GB778021			1957-07-03			
	12.	JP62065921			1987-03-25	Murayama et al.	1	
	13.	JP05078762			1993-03-30	Kazuhisa		
	14.	JP10502418			1998-03-03	Armstrong et al.		
	15.	JP11090692			1999-04-06	Takashi et al.		
	16.	JP2001279345			2001-10-10	Naofumi et al.		
	17.	JP31007808			1956-09-08	Tomonari		L
	18.	JP4116161			1992-04-16	Akitoshi		_
	19.	JP49042518			1974-04-22			
	20.	JP51010803			1976-04-07			Ĺ
	21.	JP60255300			1985-12-16	Yoshiro		
	22.	JP6112837			1986-01-21	Hiroshi		
	23.	JP64047823			1989-02-22	Shigenori et al.		
	24.	NO90840			1958-01-27	Langmyhr		
	25.	RU411962			1974-01-25	Yevdokimov		
	26.	WO96/04407			1996-02-15	Armstrong et al.		L
	27.	WO98/24575	I		1998-06-11	Abkowitz et al.		1
	28.	WO2004/022269			2004-03-18	Anderson et al.		1
	29.	WO2004/022797			2004-03-18	Anderson et al.		\perp
	30.	WO2004/022798			2004-03-18	Anderson et al.		
	31.	WO2004/022799			2004-03-18	Anderson et al.		
	32.	WO2004/022800			2004-03-18	Anderson et al.		1_
	33.	WO2004/026511			2004-04-01	Anderson et al.		1
	34.	WO2004/028655			2004-04-08	Anderson et al.		

Substitute for form PTO/SB/08a
INFORMATION DISCLOSURE
STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	10/530,775
Filing Date	01/18/2006
First Named Inventor	Richard Anderson
Art Unit	1793
Examiner Name	G. Wyszomierski
Attorney Docket Number	16561.143

	FOREIGN PATENT DOCUMENTS							
Exam. Initial*	Cite No	Foreign Document Number ³	Country code ²	Kind Code ⁴	Publication Date	Name of Patentee or Applicant of cited Document	Pgs, Col., Lns, where Relevant Pssgs or Relevant Figs Appear	т°
	35.	WO2004/033736			2004-04-22	Anderson et al.		L.
	36.	WO2004/033737			2004-04-23	Anderson et al.		
	37.	WO2004/048622			2004-10-06	Anderson et al.		
	38.	WO2005/019485			2005-03-03	Ernst		
	39.	WO2005/021807			2005-03-10	Armstrong et al.		_
	40.	WO2005/023725			2005-03-17	Armstrong et al.		_
	41.	WO2005/042792			2005-05-12	Armstrong et al.	1	
	42.	WO2007/044635			2007-04-19	Jacobsen et al.		<u> </u>
	43.	WO2007/089400			2007-08-09	Armstrong et al.		
	44.	WO2008/013518			2008-01-31	Jacobsen et al.		
	45.	WO2008/079115			2008-07-03	Ernst et al.	<u> </u>	

Application Number	10/530,775
Filing Date	01/18/2006
First Named Inventor	Richard Anderson
Art Unit	1793
Examiner Name	G. Wyszomierski
Attorney Docket Number	16561.143

NON-PATENT LITERATURE DOCUMENTS			
Examiner Initial*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	Т
	1.	KELTO et al. "Titanium Powder Metallurgy – A Perspective"; Conference: Powder Metallurgy of Titanium Alloys, Las Vegas, Nevada, Feb. 1980, pp. 1-19	
	2.	MAHAJAN et al. "Microstructure Property Correlation in Cold Pressed and Sintered Elemental Ti-6A1-4V Powder Compacts", Conference: Powder Metallurgy of Titanium Alloys, Las Vegas, Nevada, Feb. 1980, pp. 189-202	
	3.	DeKOCK et al. "Attempted Preparation of Ti-6-4 Alloy Powders from TiCl ₄ , Al, VCl ₄ , and Na"; Metallurgical Transactions B, Volume 18B, Number 1, Process Metallurgv. Sept. 1987, pp. 511-517	
	4.	UPADHYAYA "Metal Powder Compaction", Powder Metallurgy Technology, Published by Cambridge International Science Publishing, 1997; pp. 42-67	L
	5.	MOXSON et al. "Production and Applications of Low Cost Titanium Powder Products"; The international Journal of Powder Metallurgy, Volume 34, Number 5, 1998, pp. 45-47	
	6.	ALT "Solid-Liquid Separation, Introduction", Ulmann's Encyclopedia of Industrial Chemistry, ©2005 by Wiley-VCH Verlag GmbH & Co., Online Postino Date: June 15, 2000, pp1-7	
	7.	GERDEMANN et al. "Characterization of a Titanium Powder Produced Through a Novel Continuous Process", Published by Metal Powder Industries Federation, 2000, pp. 12.41-12.52	
		MOXSON et al. "Innovations in Titanium Powder Processing"; Titanium Overview, JOM, May 2000, p24	
	8.	GERDEMANN "Titanium Process Technologies"; Advanced Materials & Processes, July 2001, pp. 41-43	
	9.	LÜ et al. "Laser-Induced Materials and Processes for Rapid Prototyping" Published by Springer, 2001, pp. 153-154	1
	10.	LEE et al. "Synthesis of Nano-Structured Titanium Carbide by Mg-Thermal Reduction", Scripta Materialia, 2003, pp. 1513-1518	
	11.	CHANDRAN et al. "TiB _w -Reinforced Ti Composites: Processing, Properties, Application Prospects, and Research Needs"; Ti-B Alloys and Composites Overview, JOM, May 2004, pp. 42-48	
	12.	CHANDRAN et al. "Titanium-Boron Alloys and Composites: Processing, Properties, and Applications"; Ti-B Alloys and Composites Commentary, JOM. May 2004 pp. 32 and 41	
	13.	HANUSIÁK et al. "The Prospects for Hybrid Fiber-Reinforced Ti-TiB-Matrix Composites", Ti-B Alloys and Composites Overview, JOM, May 2004, pp. 49-50	
	14.	KUMARI et al. "High-Temperature Deformation Behavior of Ti-TiB _w In-Situ Metal-Matrix Composites", Ti-B Alloys and Composites Research Summary, JOM, May 2004, pp. 51-55	

Doc code: IDS

Doc description: Information Disclosure Statement (IDS) Filed

Substitute for form PTO/SB/08a
INFORMATION DISCLOSURE
STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

10/530,775
01/18/2006
Richard Anderson
1793
G. Wyszomierski
16561.143

NON-PATENT LITERATURE DOCUMENTS				
Examiner Initial*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the afficie (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T ⁵	
	15.	SAITO "The Automotive Application of Discontinuously Reinforced TiB-Ti Composites", Ti-B Alloys and Composites Overview, JOM, May 2004, pp. 33-36		
	16.	YOLTON "The Pre-Alloyed Powder Metallurgy of Titanium with Boron and Carbon Additions", Ti-B Alloys and Composites Research Summary, JOM, May 2004, pp. 56-59		
	17.	Research Report, P/M Technology News, Crucible Research, August 2005, Volume 1, Issue 2, 2 pages		

	EXAMINER SIGNATURE
Examiner Signature	Date Considered
	The state of the s

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. ² Enter office that issued the document, by the two-letter code (WIPO Standard ST.3.) For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ² Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ³ Applicant is to place a check mark here if English language translation is attached.